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A Study On the Impact of Digital Payment System On Consumer Purchasing Behaviour of Gen-Z Women in Bengaluru

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Abstract

The study explores the influence of digital payment system on the purchasing behaviour and financial management habits of Gen Z women in Bengaluru. With the rapid adoption of mobile wallets, UPI platforms, and digital payments, convenience has become a defining factor in daily transactions. However, findings say that while these platforms are widely used, they do not necessarily drive more frequent purchases. Instead, their impact is more evident in encouraging financial discipline, such as setting spending limits and using budgeting tools. The results highlight a shift in perception digital payment systems are not merely transaction tools but are becoming valuable partners in fostering responsible money management. This reflects the evolving relationship between technology and consumer behaviour, where digital convenience meets conscious financial choices, empowering a tech-savvy generation to balance ease with accountability.

Keywords: Digital Payments, Gen Z Women, Purchasing Behaviour, Financial Discipline, Bengaluru.

1. Introduction

The digital revolution has rapidly changed after the covid pandemic. The consumers behaviour towards the purchasing behaviour changes through digital payment systems as its convenient. These systems include app wallets, QR-based payments, UPI (Unified Payment Interface), contactless cards, and various fintech applications that make monetary transactions seamless and instantaneous. The key demographic groups which are influenced are Gen Z women who are not only tech upgraded but also active consumers for online and offline through digital payments.

Digital payments offer different options like as convenience, transaction speed, and cashbacks, etc helping them choose digital payments. Genz women these payment offers advantages on lifestyle, preference, influence peer trends to shape purchasing behaviours. As the dependency on smartphones and e-commerce platforms increases, digital payment systems also begin influencing purchase frequency, spending habits, brand switching tendencies, and impulsive buying.

This paper investigates the characteristics of Generation Z, who grew up in the digital era, and the influence of behavioural, psychological, and social dimensions. The study provides insightful information to the transformative effects of digital payments of consumer preference, particularly in the theme of Gen Z women. The research will inform marketing strategies, fintech app development, digital payments used,

brand choice, financial management on purchasing buying behaviour and financial literacy of Gen Z women.

2. Statement of Problem

Urban India's consumer behaviours have changed rapidly result growing use ofdigital transaction systems like online banking, mobile wallets, and UPI. One of India's most technologically advanced cities, Bengaluru has seen a sharp increase in digital financial infrastructure as well as a large concentration of Gen Z users, especially financially independent and tech- savvy women. Despite the speed and ease of digital payments, little is known about how they are affecting Bengaluru's Gen Z women's purchasing habits.

However, current research frequently ignores gender and city-specific findings, creating a knowledge gap about how digital transactions actually influence consumer choices in digitally advanced urban settings like Bengaluru. In order to detect new patterns, financial practices, and marketing implications in this rapidly changing digital economy, it is imperative that the behavioral influence of digital transaction systems on Gen Z women in Bengaluru be studied.

3. Need for Study

Gen Z women are leading the shift toward digital payments, with 85% favoring cashless options such as digital wallets, UPI, and Buy Now Pay Later (BNPL) services over traditional cash. However, BNPL usage is raising financial concerns 64% rely on it for essential purchases, and 41% have experienced late payments, highlighting potential risks around growing debt and negative effects on credit health.

4. Review of Literature

- Shree (2021) – "Digital Payments and Consumer Experience in India". Sample Size: 250 respondents, Research Design: Descriptive, Method: Structured questionnaire survey. Found that trust and ease of use positively influence adoption, while fraud experience reduces usage. Recommended stronger security protocols to increase user confidence.
- Harish Kumar & Sofat (2022) – "Digital Payment and Consumer Buying Behaviour – Uttarakhand". Sample Size: 200 respondents, Research Design: Descriptive, Method: Questionnaire-based field survey. Awareness, accessibility, and performance expectancy significantly affect adoption. Suggested targeted awareness drives for rural and semi-urban areas.
- Biswas (2021) – "Effect of Mobile Financial Services on Financial Behavior". Sample Size: Secondary data (national survey), Research Design: Analytical, Method: Statistical analysis of existing datasets. Mobile services enhance financial inclusion, investment, and credit usage but show gender gaps. Recommended fintech policies tailored for women.
- Sharma (2024) – "Decoding Financial Behaviour in Urban Households". Sample Size: National AIDIS data, Research Design: Analytical, Method: Regression and statistical modelling. Education and income levels strongly predict digital payment adoption. Suggested inclusion measures for lower-income households.
- Dev (2024) – "UPI's Impact on Spending Behavior". Sample Size: 300 respondents, Research Design: Mixed-method, Method: Surveys combined with usability testing. UPI usage led to

increased spending and reduced guilt in purchases. Recommended app features to control impulsive spending.

- Garg & Punchal (2017) – "Benefits and Challenges of a Cashless Economy". Sample Size: 150 respondents, Research Design: Descriptive Method: Structured questionnaire survey. Highlighted reduced corruption and transaction costs as benefits; digital literacy as a challenge. Advocated financial literacy campaigns.
- Das & Agarwal (2010) – "Cashless Payment System in India – A Roadmap". Sample Size: Secondary data, Research Design: Exploratory, Method: Literature review and policy analysis. Outlined fraud reduction, transaction traceability, and financial integration benefits. Called for secure digital infrastructure.
- Kumar & Chaubey (2017) – "Barriers to Adoption of Digital Payments". Sample Size: 180 respondents, Research Design: Descriptive, Method: Structured interviews. Identified resistance to change and trust issues as main barriers. Suggested awareness campaigns and infrastructure upgrades.
- Gokilavani (2018) – "Customer Perception Towards Digital Payments". Sample Size: 200 respondents, Research Design: Descriptive, Method: Questionnaire survey. Socioeconomic factors influence adoption; technical delays reduce trust. Recommended improving platform reliability.
- Reddy & Reddy (2015) – "Ease and Security of Digital Payments." Sample Size: 120 respondents, Research Design: Descriptive, Method: Field survey with structured questions. Convenience and perceived security are main adoption drivers. Urged stronger fraud protection systems.

5. Research Gap

Based on the reviewed literature, it is clear that while numerous studies in India have examined digital payment adoption, most focus on general consumer groups, specific regions, or broad demographic categories. Very few have concentrated exclusively on Generation Z women, particularly in metropolitan areas such as Bengaluru, where fintech infrastructure and digital literacy levels are relatively advanced. Existing research often addresses factors like convenience, trust, security, and awareness, yet rarely connects these directly to purchasing behaviors such as transaction frequency, impulsive buying, and brand loyalty.

Furthermore, there is a lack of gender-sensitive analysis that considers the unique financial habits, lifestyle influences, and social factors shaping Gen Z women's digital payment preferences. Importantly, no study has been identified that specifically investigates this topic in Bengaluru South, Vijayanagar, despite it being a digitally active locality. This creates a valuable research opportunity to generate insights that can inform fintech service design, targeted marketing strategies, and policy interventions for this influential demographic.

6. Objectives

1.To identify the preferred digital payment platforms used by Gen Z women in Bengaluru.

2. To analyse financial decision-making behaviours associates with the use of digital payment methods.

7. Hypotheses

• Hypothesis 1a: There is a significant relationship between digital payment usage and frequent small purchases among Gen Z women.
• Hypothesis 1b There is no a significant relationship between digital payment usage and frequent small purchases among Gen Z women.

• Hypothesis 2a: There is a significant relationship between the use of digital payment systems and the ease of financial investment.
• Hypothesis 2b: There is no significant relationship between the use of digital payment systems and the ease of financial investment among Gen Z women.

8. Research Methodology

- **Research Design:** This research adopts a descriptive design to examine and present the current patterns, attitudes, and behaviors of Gen Z women towards digital payment systems in Bengaluru Urban. It focuses on accurately describing the existing situation without manipulating variables, thereby providing an objective understanding of the phenomenon.
- **Population:** The population comprises women belonging to Generation Z (born between 1997 and 2012) residing in Bengaluru Urban. This group is highly familiar with technology and has significant exposure to various digital payment platforms.
- **Sample:** The study's sample includes 100 Gen Z women from Bengaluru Urban, representing a mix of different educational levels, occupations, and spending patterns within the population.
- **Sampling Method:** A random sampling method is applied to the study to ensure every eligible individual in the target population had an equal chance to being chosen. This method helped reduce selection bias and maintain a fair representation.
- **Sample Size:** The research was based on 100 respondents, chosen to give sufficient data for statistical analysis while remaining manageable within the study's timeframe and resources.
- **Data Collection Method**: Data is collected through a fine survey, made available both as printed questionnaires and through Google Forms. This dual approach ensured greater accessibility, allowing participation from respondents who preferred either offline or online formats.
- **Data Analysis Tool:** The collected data is analyzed through SPSS software. Descriptive statistics were employed to summarize the dataset, Pearson correlation is used to assess the relationships between continuous variables. Additionally, Chi-square tests were conducted to explore associations between categorical variables. All tests were performed at a 5% level of significance.
- **Type of Data:** The study relies on primary data, directly obtained from participants through the survey. The dataset includes both quantitative information and qualitative perspectives

9. Scope of the Study

The scope of this study is confined to understanding how digital payment systems affect the purchasing behavior of Generation Z women residing specifically in Bengaluru South, Vijayanagar. It examines their preferences, frequency of use, and behavioral changes in aspects such as spending patterns, brand choices, and impulsive buying tendencies. The study also evaluates the influence of factors like convenience, cashback offers, security, and social trends on their adoption of digital transactions. Insights for this

research will assist fintech providers, retailers, and policymakers in creating targeted strategies for this digitally active and influential demographic. Although focused on Bengaluru South, Vijayanagar, the findings may offer relevant guidance for similar urban areas with similar consumer characteristics

10. Limitations

• This study focuses only on Gen Z women living in Bengaluru South, Vijayanagar, so the results may not represent the experiences or behaviors of similar groups in other localities or rural regions.
• With the sample size of just 100 participants, the findings provide useful insights, not fully capturing the range of perspectives within the entire Gen Z female population in the area.
• The research is self-reported responses, which can sometimes be affected by memory lapses, personal bias, on the habit of providing answers that reflect positively on oneself.
• The data reflects a specific time frame, so rapid changes trends could make some findings are less relevant for the future.

11. Data Analysis

Table 1 – Independent Samples t-test: Frequency of Payment Usage by Age Group

Statistic	Value
t-value	1.957
p-value	0.058

Interpretation: The independent samples t-test compared the mean frequency of digital payment usage between younger respondents (aged 18–23) and older respondents (aged 24– 29). The t-value of 1.96 with a p-value of 0.058 indicates that there is no statistically significant difference in usage frequency between the two groups at the 0.05 level. However, the p-value is close to the threshold, suggesting a possible trend where younger participants are using digital payment platforms slightly more often.

Table 2 – Independent Samples t-test: Frequency of Digital Payment Usage by Income Group

Statistic	Value
t-value	1.954
p-value	0.058

Interpretation: An independent sample for t-test was conducted to compare the average frequency of digital payment usage between respondents with low income (< ₹25,000 per month) and those with high income (≥ ₹25,000 per month). The t-value of 1.954 and p-value of 0.058 show no statistically significant difference at the 0.05 level. Nonetheless, the closeness to significance suggests that lower-income individuals might engage in digital transaction slightly more often.

Hypothesis 1 Tests

Table 3 – Pearson Correlation: Payment Usage vs. Increased Frequency of Purchases.

Variables	Spearman rho	Sig.(2-tailed)	N	Pearson r	Pearson p

Usage vs Frequent Small Purchases	-0.076	0.4551	100	-0.167	0.0975

Interpretation: The correlation between how often digital payments are used and the preference for making frequent small purchases is weak and not statistically significant (Spearman's rho = -0.076, p = 0.4551). At the 5% significance level, the null hypothesis (1b) cannot be rejected, indicating that the data does not provide sufficient evidence to support a link between increased usage frequency and more frequent purchasing behavior among Gen Z women.

Table 4 – Chi-square Test: Digital Payment Usage vs. Increased Frequency of Purchases

Test	Chi-Square Value	df	Sig. (p-value)
Pearson Chi-Square	0.0	5	1.0

Interpretation: At the 5% significance level, the results suggest we cannot reject the null hypothesis, indicating no clear link between how often digital payments are used and the tendency to make frequent small purchases. This is likely because the purchase frequency responses lacked sufficient variation.

Conclusion for Hypotheses 1a and 1b

At the 5% significance level, both Pearson correlation and Chi-square tests show no statistical relationship. Therefore, Hypothesis 1a (there is a significant relationship) is not supported. Instead, the results align with Hypothesis 1b (there is no significant relationship). The absence of variation in responses means we cannot establish any meaningful statistical connection with digital payment usage and increased purchase frequency in this sample.

Hypothesis 2 Tests

Table 5 - Pearson Correlation – Setting monthly spending limits on digital wallets or apps?

Variable	Pearson r	Sig. (p-value)	N	Decision (5%)
Usage vs Do you set monthly spending limits on wallets apps?	**-0.291**	**0.0033**	**100**	**Reject H0 (Significant)**

Interpretation: The Pearson correlation test shows a statistically significant relationship between digital payment usage and do you set monthly spending limits on digital wallets or apps? (r = -0.291, p = 0.0033). This suggest that higher usage levels are meaningfully associated with this aspect of financial investment.

Table 6 - Chi-square Test – Setting monthly spending limits on digital wallets or apps?

Test	Chi-Square Value	df	Sig. (p-value)	Decision (5%)

Pearson Chi-Square	8.821	3	0.0318	Reject (Significant) H0

Interpretation: The Chi-square test also reveals a significant association between usage frequency and do you set monthly spending limits on digital wallets or apps? (Chi^2 = 8.821, df = 3, p = 0.0318). This supports Hypothesis 2a, suggesting a meaningful relationship.

Table 7 - Pearson Correlation – Which feature of digital payments helps you the most with financial planning?

Variable	Pearson r	Sig. (p-value)	N	Decision (5%)
Usage vs Which feature of digital payments helps you the most with financial planning?	-0.219	0.0282	100	Reject H0 (Significant)

Interpretation: The Pearson correlation analysis reveals a meaningful connection between how extensively digital payments are used and which specific feature users consider most useful for financial planning (r = -0.219, p = 0.0282). This implies that higher usage is significantly associated with certain features that aid users in managing their finances more efficiently.

Table 8 - Chi-square Test – Which feature of digital payments helps you the most with financial planning?

Test	Chi-Square Value	df	Sig. (p-value)	Decision (5%)
Pearson Chi-Square	102.733	5	0.0000	Reject (Significant) H0

Interpretation: The Chi-square test also reveals a significant association between usage frequency and which feature of digital payments helps you the most with financial planning? (Chi^2 = 102.733, DF = 5, p = 0.0000). This supports Hypothesis 2a, suggesting a meaningful relationship.

Conclusion for Hypotheses 2a and 2b

At the 5% significance level, both the Pearson correlation and Chi-square tests confirm a statistically significant relationship. As a result, Hypothesis 2a is accepted, and Hypothesis 2b is rejected. The findings indicate that frequent digital payment usage is strongly associated with proactive financial habits, such as budgeting and utilizing planning tools. This highlights the positive role digital payment systems play in supporting effective financial management among Gen Z women in the sample.

12. Findings

The results show that while Gen Z women in Bengaluru often use digital payment systems, this doesn't automatically translate to more frequent purchasing. Statistical analysis for Hypothesis 1 revealed no significant link between frequent digital payment use and an increase in small, regular purchases. This implies that convenience in payment methods alone isn't a major factor influencing buying behavior in this group. Additionally, participants who were younger or belonged to lowerincome groups exhibited a mild, though not statistically significant, inclination toward using digital platforms more often hinting at trends that may warrant further investigation.

In contrast, the findings strongly support Hypothesis 2, showing a clear connection between digital payment usage and proactive financial management behaviors. Higher usage levels were significantly associated with setting monthly spending limits and utilizing financial planning features offered by payment apps. This suggests that Gen Z women are not only using these tools for transactions but also leveraging them for better control over their finances. The results highlight the potential of digital payment systems to encourage responsible financial habits, positioning them as more than just a means of payment, but as tools for informed spending and investment planning.

13. Conclusion

Based on the study's outcomes, it is evident that while digital payment systems are widely adopted by Gen Z women in Bengaluru, their use does not automatically lead to more frequent purchases. Instead, these platforms appear to play a stronger role in promoting financial discipline and planning. The significant link between usage and practices like setting spending limits highlights how digital tools can empower users to manage money effectively. These findings suggest that fintech solutions have the potential to go beyond convenience, shaping healthier financial behaviors and supporting informed decision-making among a tech-savvy, financially aware, and increasingly influential consumer segment.

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